

Biological Threats



According to the US National Institutes of Health, the last reported case of smallpox occurred in 1978.

Clinical Features	Diagnosis	Medical Management
Botulinum Toxins		
Symptoms appear several hours to one to two days after exposure.	An epidemic of cases of bulbar and neuromuscular disease.	Respiratory failure is the principal cause of death. Tracheostomy, endotracheal intubation, and ventilatory assistance may be required.
Initial Blurred vision, drooping eyelids, difficulty understanding language, difficulty in speaking, muscle weakness.	Other causes could be considered; however, the extent and epidemiology of the outbreak will help diagnose and define whether or not there was an attack.	Antitoxins are available, but they are horse serums and may produce reactions in those allergic to horse serum.
Progression—Day 3 Mucous in throat, neuromuscular symptoms, respiratory distress, difficulty in swallowing, feels like a cold without fever.		
Progression—Day 4 Indistinct speech, pupils moderately dilated, retarded eye motions, “mental numbness.”		
Smallpox		
Incubation average 12 days. Symptoms begin acutely.	It is necessary to distinguish smallpox from chicken pox. Examination of vesicular scrapings under a microscope is the usual method for diagnosis.	Strict quarantine for 17 days of all persons in contact with index cases.
Phase I Symptoms: Malaise, fever, chills, vomiting, headache, backache. Light-skinned patients may exhibit rash during this phase.		No specific therapy.
Phase II Symptoms: Facial rash and eruptions on mucous membrane leading to infectious secretions. Eruptions on lower extremities spreading to the trunk over the following eight to 14 days (these pustules later form scabs).		Supportive care to prevent secondary infections.